

CLAIMS:

1. An electrically powered portable device, the device being other than a toothbrush, the device including means for providing a function to be performed by the device, an electrical power supply which incorporates at least one capacitor for storing electrical charge to power the device, electronic control circuitry to control electrical power drawn from the electrical power supply for driving the function providing means, and a recharge interface for recharging the electrical power supply, the recharge interface being arranged to be electrically connectable to a charging device.
2. An electrically powered portable device according to claim 1 wherein the recharge interface is arranged to be selectively electrically connectable to a portable charging device or a charging base unit adapted to be powered by mains electrical power.
3. An electrically powered portable device according to claim 1 or claim 2 wherein the or each capacitor has a capacitance of from 5 to 50 Farad.
4. An electrically powered portable device according to any one of claims 1 to 3 wherein the at least one capacitor has a working output voltage of from 1V to 3.6V.
5. An electrically powered portable device according to any one of claims 1 to 4 wherein the electrical power supply further comprises a voltage regulator for regulating the output voltage of the at least one capacitor.
6. An electrically powered portable device according to claim 5 wherein the voltage regulator is adapted to output a voltage having a value substantially the same as the voltage of the at least one capacitor when fully charged.
7. An electrically powered portable device according to claim 5 or claim 6 wherein the voltage regulator and the at least one capacitor are integrated to form a single packaged element which has a pair of input terminals and a pair of output terminals.

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8. An electrically powered portable device according to claim 7 wherein the single packaged element is removable.
9. An electrically powered portable device according to claim 7 or claim 8 wherein the single packaged element is cylindrical, prismatic in shape or custom shaped
10. An electrically powered portable device according to any one of claims 1 to 9 wherein the electrical power supply further incorporates a voltage source in combination with the at least one capacitor, the voltage source and the at least one capacitor being arranged so that the voltage source progressively charges the at least one capacitor for any period that the at least one capacitor is not fully charged.
11. An electrically powered portable device according to claim 10 wherein the voltage source comprises at least one battery.
12. An electrically powered portable device according to claim 11 wherein the at least one battery continuously provides low electrical power to the device and the at least one capacitor intermittently provides high electrical power to the device.
13. An electrically powered portable device according to claim 11 or claim 12 wherein the at least one battery continuously provides electrical power to at least one first component of the function providing means and the at least one capacitor intermittently provides high electrical power to at least one second component of the function providing means.
14. An electrically powered portable device according to any one of claims 11 to 13 wherein the at least one battery is removable.
15. An electrically powered portable device according to claim 14 wherein the at least one battery is packaged together with at least one consumable of the device in a common package.

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16. An electrically powered portable device according to claim 15 wherein the common package is removably mounted in the device.
17. An electrically powered portable device according to any one of claims 1 to 16 wherein the recharge interface has a total impedance of not more than 0.3 Ohms
18. An electrically powered portable charging device suitable for temporarily storing electrical charge for delivery to an electrical device electrically connectable to the charging device, the charging device comprising at least one storage element for temporarily storing electrical charge, an input for receiving, from a separate charging base unit to which the charging device is electrically connectable, an electrical charge to be stored by at least one storage element, and an output for delivering the stored electrical charge to the electrical device, the output comprising an electrical connector for selective electrical connection to an electrical device to be charged by the charging device.
19. A charging device according to claim 18 wherein the input comprises an electrical connector for electrical connection to a charging base unit.
20. A charging device according to claim 19 wherein at least one of the input and output electrical connectors comprises low impedance contacts, having an impedance of not more than 0.2 Ohms.
21. A charging device according to any one of claims 18 to 20 wherein the charging device has a total impedance of not more than 0.3 Ohms.
22. A charging device according to any one of claims 18 to 21 wherein the at least one storage element comprises at least one capacitor, the or each capacitor having a capacitance of 5 to 50 Farad.
23. A charging device according to claim 22 wherein the at least one capacitor has a working output voltage of from 1V to 3.6V.

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24. A charging device according to claim 22 or claim 23 further comprising at least one battery electrically connected to the at least one capacitor so that the at least one battery progressively charges the at least one capacitor for any period that the at least one capacitor is not fully charged.
25. A charging device according to any one of claims 18 to 24 wherein the input is adapted to receive a trickle charge or rapid charge from a base unit.
26. A charging device according to any one of claims 18 to 21 wherein at least one storage element comprises one or more battery dry cells or rechargeable batteries.
27. The combination of the electrically powered portable device of any one of claims 1 to 17 and the charging device of any one of claims 18 to 26.
28. The combination of claim 27 wherein at least one storage element of the charging device comprises at least one capacitor, the or each of which has a capacitance of from 5 to 50 Farad, and the charging device is adapted so that the time to charge the at least one capacitor in the electrically powered portable device is from 2 to 15 seconds.
29. The combination of the charging device of any one of claims 18 to 26 and a charging base unit having an electrical output for connection to the input of the charging device, the charging base unit being adapted to be powered by mains electrical power.
30. The combination of claim 29 wherein at least one storage element of the charging device comprises at least one capacitor, the or each of which has a capacitance of from 5 to 50 Farad, and the time for the charging base unit to charge the at least one capacitor in the charging device is from 2 to 15 seconds.
31. An electrically powered portable device according to any one of claims 1 to 17 which is a delivery device for release of at least one volatile compound stored in the device.

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32. A delivery device according to claim 31, the delivery device comprising a reservoir for storing the at least one volatile compound, a dispensing device for dispensing the at least one volatile compound from a delivery surface of the dispensing device, the electronic control circuitry controlling the dispensing device, a conduit to transfer the at least one volatile compound from the reservoir to the delivery surface, and the at least one capacitor of the electrical power supply is capable of containing sufficient charge to power the dispensing device for a predetermined period.

33. A delivery device according to claim 31 or claim 32 wherein the charging device to which the recharge interface is arranged to be electrically connectable to is a portable charging device according to any one of claims 18 to 26 or a charging base unit having an electrical output for connection to the recharge interface, the charging base unit being adapted to be powered by mains electrical power.

34. A delivery device according to any one of claims 31 to 33 wherein the dispensing device is adapted periodically to dispense the at least one volatile compound as a spray.

35. A delivery device according to claim 34 wherein the electronic control circuitry is adapted to control the duration of spray pulses and/or the time between successive sprays.

36. A delivery device according to any one of claims 31 to 35 wherein the dispensing device is adapted periodically to dispense the at least one volatile compound and at least one capacitor and electronic control circuitry are adapted to provide a periodic delivery of the at least one volatile compound for a period of up to 60 (extend this period within the claim) days in a given charging cycle of the at least one capacitor.

37. A delivery device according to claim 35 or claim 36 wherein the time between successive pulses is from 30 seconds to 30 minutes, and the delivery weight of the at least one volatile compound per pulse is from 0.01mg- 0.5mg.

38. A delivery device according to claim 37 wherein the delivery weight of the at least one volatile compound per pulse is from 0.03mg-0.3mg

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39. The combination of the charging device of any one of claims 18 to 26 and the delivery device of any one of claims 31 to 38, the output of the charging device being connectable to the recharge interface of the delivery device.

40. The combination of claim 39 wherein at least one storage element of the charging device comprises at least one capacitor, the or each of which has a capacitance of from 5 to 50 Farad, the or each capacitor of the delivery device has a capacitance of from 5 to 50 Farad and the time for the charging device to charge the at least one capacitor in the delivery device is from 2 to 15 seconds

41. The combination of the delivery device of any one of claims 31 to 38 and a charging base unit having an electrical output for connection to the recharge interface of the delivery device, the charging base unit being adapted to be powered by mains electrical power.

42. The combination of claim 41 wherein the or each capacitor of the delivery device has a capacitance of from 5 to 50 Farad and the time for the charging base unit to charge the at least one capacitor in the delivery device is from 2 to 15 seconds.

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